To: Egan, Robert[egan.robert@epa.gov]
Cc: Greenwater, Anthony[greenwater.anthony@epa.gov]; Manville, Jennifer[manville.jennifer@epa.gov]; Dee.allen@ldftribe.com[Dee.allen@ldftribe.com]; Kamke, Sherry[Kamke.Sherry@epa.gov]
From: Hanson, Kristen
Sent: Tue 3/28/2017 4:32:35 PM
Subject: RE: Haskell Lake Area Petroleum Contamination SIte 3d graphic model presentation
RE: Haskell Lake Area Petroleum Contamination Site- Well Placement Planning

Hi Bob,

We have availability for the Haskell Lake Area Petroleum Contamination Site Model Presentation/Q&A/ Monitoring Well Network Planning webinar presentation on:

3/29: 8-11

3/31: 8-12

4/3: 12-3

I have included model comments previously submitted below and attached the most recent well placement email.

Kristen

From: Hanson, Kristen
Sent: Tuesday, March 21, 2017 12:10 PM
To: egan.robert@epa.gov
Cc: kamke.sherry@epa.gov; Greenwater.anthony@Epa.gov; Manville, Jennifer (manville.jennifer@epa.gov); Allen, Dee; 'Wawronowicz, Larry (lwawronowicz@ldftribe.com)'
Subject: Haskell Lake Contimaitoin SIte EPA/Tribe Commitmment 2B, Tribal model comments submitted and incorporated

Good Morning,

The model was shared with the Tribe and a short conference call with Bob Egan and Tom Kady was offered to explain the model to Tribal staff. There were a number of questions of the model that neither Bob nor Tom could answer and contractor contact was needed. Bob was going to ask of the contractor and provide feedback to the Tribe and Tom. In addition to the questions raised in the short conference call awaiting feedback, the following comments/questions/and requests of the modeling effort are provided below.

Source Data

Please provide the source data used in the model. During a previous S2C2 presentation, Mr. Jason Ruff was able to demonstrate source data used in the model viewed in a spreadsheet. This is a considerable effort as this is the only place site data has been accumulated in one place.

Overall Comments

The model shows a large perimeter plume blob. The detail of the large area within the plume is not viewable with the exception of one cross section. Horizontal and vertical slices (as demonstrated) would be useful.

Geology interpretations do not include logged and recognized MIPHT identified units, particularly near the source are-

Some of the identified units are helpful, but it is incomplete and the interpretation is particularly incomplete and misleading in the source area. Logged interbedded sand silts and clays correlate to the distinct oscillating MiPHT data between 5-15 feet appear to be missing, particularly in the source area. Other missing logged stratigraphy includes find grain sands, silty sands, gravel, clayey silty sands. Also MIP 5 and BH 17 appear to be missing. The lithology shortcoming is most apparent in the source area and may be resolved in the planned cross sections. For Example- MIP 6 and BH02 are shown along the models's cross section line. MIP 6 shows interbedded silt/sand/clay unit and BH02 logs silty sand with clay, sand with clay and gravel. The model shows this area as uninterrupted sands and gravel.

Generally I have noticed the organic units extending from the lake to the pond include logged organics like peat and wood and similar logged organics are again noticed on the north side of the site. Finer sediments, shown as lower conductivity units near source area and central portion of the site are logged as interbedded silts/sands/gravels and clays.

Also, there appears to be three areas of lower conductivity (and finer material) that are expressing controls over fate and transport. This are not discernable in the current presentation.

Specific Data and Model Interpretations

The model extends the contaminant plume further east of the clean VAS04. Please provide what data is used to extend the model easterly.

Groundwater collected from BH25 from 17-27 feet is Non Detect, but the model shows the location within the plume.

What data was used to extend the plume to VAS03?

Where there is more than one sampling event at a monitoring well, what data is used (i.e concentration based, date based, method based, etc)?

Estimated Hydraulic Conductivity

Vertical Plan View Slices would be useful here. There are distinct hydraulic controls within the source area at varying depths. The deeper NAPL responds to higher hydraulic conductivity between 10-13 feet.

Soil

BH20 extends to 20 feet but is shown in the model as about 10 feet. PID results from BH04 suggest vertical extent extends to 14-15 feet. PID results do not agree with the model.

-

Soil Volumetrics-note

The available soil analytical below the water table is limited(only 2 samples from the water table ad 2 samples from the 10-15 feet below grade) It also appears that the samples are collected near extent margins and not from the highest contaminated area. In addition, the sampling method from depth (open hole geoprobe) provided low recovery soil from caving holes. The reliability of soil samples from depth is low.

From: Egan, Robert [mailto:egan.robert@epa.gov]
Sent: Tuesday, March 28, 2017 10:47 AM
To: Hanson, Kristen
Cc: Greenwater, Anthony; Manville, Jennifer; Allen, Dee; Kamke, Sherry
Subject: RE: Haskell Lake Area Petroleum Contamination SIte 3d graphic model presentation

Hi Kristen,

Unfortunately, 3/30 is one of the days that the contractors are not available (see the message below from Matt Faust). Can you provide your next available date?

Thank you.

Bob Egan

Corrective Action Manager

Underground Storage Tanks Section

RCRA Branch

EPA Region 5

(312) 886-6212

(312) 692-2911 (fax)

From: Hanson, Kristen [mailto:KHanson@ldftribe.com]
Sent: Tuesday, March 28, 2017 10:35 AM
To: Egan, Robert <egan.robert@epa.gov>
Cc: Greenwater, Anthony <greenwater.anthony@epa.gov>; Manville, Jennifer <manville.jennifer@epa.gov>; Dee.allen@ldftribe.com

Subject: Haskell Lake Area Petroleum Contamination SIte 3d graphic model presentation

Good Morning Bob,

We have availability for the Haskell Lake Area Petroleum Contamination Site Model Presentation/Q&A/ Monitoring Well Network Planning webinar presentation on Thursday March 30th 2017 during the following time blocks:

3/30: 8-10, 1-3

Kristen Hanson

Environmental Response Program Coordinator

Lac du Flambeau Tribal Natural Resource Department

Office: 715-588-4290

Cell : 715-614-4644

From: Egan, Robert [mailto:egan.robert@epa.gov]
Sent: Monday, March 27, 2017 2:40 PM
To: Hanson, Kristen
Cc: Allen, Dee; Kamke, Sherry
Subject: FW: Tower Standard model

Hi Kristen,

Please note the contractors' availability below and let me know what days and times work for you.

Thank you.

Bob

Bob Egan

Corrective Action Manager

Underground Storage Tanks Section

RCRA Branch

EPA Region 5

(312) 886-6212

(312) 692-2911 (fax)

From: Faust, Matt [mailto:mfaust@bristol-companies.com]
Sent: Monday, March 27, 2017 1:26 PM
To: Egan, Robert <egan.robert@epa.gov>
Cc: Edwards, Christine <Edwards.Christine@epa.gov>; Allen, Bob <ballen@bristol-companies.com>; Kady, Thomas <Kady.Thomas@epa.gov>
Subject: RE: Tower Standard model

PLEASE NOTE THE EPA AND CONTRACTORS ARE RECEIVING THIS EMAIL

Bob,

S2C2 and Bristol's schedule is open for the next two weeks, with the exception of this Thursday (3/30) and Tuesday next week (4/4).

--Matt

Matt Faust, P.G.
Project Manager/Geologist
Bristol Environmental Remediation Services, LLC
Phone : (907) 743-9346